computer communications

INDEX TO VOLUME 1: 1978

AUTHOR

Bennett, F J Selection of a shared-logic word-processing system 303
Clark, R Character coding for data communications 159
Decina, M, Mossotto, C and Romagnoli, M Prospects for common channel signalling in Italy 123
de Smith, M Business telecommunications 128
Duncan, A Integrated banking network system 94
Feldman, R and Mildenhall, D The British Post Office and packet switching 91
Ford, R Evolution of a teleprocessing network 145
Fraser, G National police computing plan 200
Goodier, M British Steel Corporation data network 179
Gunton, A Network operating system for telecommunications applications 253
Herskowitz, G and Shapiro, S Data communication channel capacity for multiple-buffered concentrators 196
Houldsworth, J Standards for open network operation 5
Huber, W Recent developments within Euronet 79
Jamet, B and Monnet, M Terminal-handling protocols in a packet-switched public data network 188
Johnson, J P and Heap, J M Designing an X.25 network-to-host interface
Jones, R Command and control of the emergency services 19
Joyce, J Principles of database management in a distributed system 257
Kitezawa, S and Sakai, T Performance evaluation of the Kuipnet computer network 149
Maekawa, M Interprocess communications by functionally distributed systems 75
Marsh, S Police command and control system 183
Moore, R Data communications system for the APL user 295
Nicol, K Activities of the UK National Committee on Computer Networks 45
Nokes, C Availability and reliability of teleprocessing systems 33
Pease, D L Impact of electronic funds transfer systems on networks 85
Pitcher, J Practical optical fibre data links 300
Poole, J Point-of-sale terminal systems 25
Sloman, M S X.25 explained 310
Smith, I Microcomputer system in a communications environment 134
Taylor, F Progress towards open system standards 210
Weissberger, A Datalink controls and LSI circuits – the confluence of architecture and technology 234
Williams, P Access to information in Europe 290
Wong, J W Flow control in message-switched communications networks 67

TITLE

Access to information in Europe **Williams, P** 290
Activities of the UK National Committee on Computer Networks **Nicol, K** 45
Availability and reliability of teleprocessing systems **Nokes, C** 33
British Post Office and packet switching **Feldman, R and Mildenhall, D** 91
British Steel Corporation data network **Goodier, M** 179
Business telecommunications **de Smith, M** 128
Character coding for data communications **Clark, R** 159
Command and control of the emergency services **Jones, R** 19
Data communication channel capacity for multiple-buffered concentrators **Herskowitz, G and Shapiro, S** 196
Data communications system for the APL user **Moore, R** 295
Datalink controls and LSI circuits – the confluence of architecture and technology **Weissberger, A** 234
Designing an X.25 network-to-host interface **Johnson, J P and Heap, J M** 13
Evolution of a teleprocessing network **Ford, R** 145
Flow control in message-switched communications networks **Wong, J W** 67
Impact of electronic funds transfer systems on networks **Pease, D L** 85
Integrated banking network system **Duncan, A** 94
Interprocess communications by functionally distributed systems **Maekawa M** 75
Microcomputer system in a communications environment **Smith, I** 134
National police computing plan **Fraser, G** 200
Network operating system for telecommunications applications **Gunton, T** 253
Performance evaluation of the Kuipnet computer network **Kitezawa, S and Sakai, T** 149
Point-of-sale terminal systems **Poole, J** 25
Police command and control system **Marsh, S** 183
Practical optical fibre datalinks **Pitcher, J** 300
Principles of database management in a distributed system **Joyce, J** 257
Principles of recoverability in transaction-processing systems 242
Progress towards open system standards **Taylor, F** 210
Prospects for common channel signalling in Italy **Decina, M, Mossotto, C and Romagnoli, M** 123
Recent developments within Euronet **Huber, W** 79
Selection of a shared-logic word-processing system **Bennett, F J** 303
Standards for open network operation **Houldsworth, J** 5
Terminal-handling protocols in a packet-switched public data network **Jamet, B and Monnet, M** 188
X.25 explained **Sloman, M S** 310

APPLICATIONS

Command and control of the emergency services **Jones, R** 19
National police computing plan **Fraser, G** 200
Point-of-sale terminal systems **Poole, J** 25
Police command and control system **Marsh, S** 183
Prestel 334
Viewdata – threat or promise? 122

CALENDAR 64, 120, 176, 232, 288, 344

CONFERENCES

Business telecommunications **Simmons, B D** 99
Communications equipment and systems 172
Datafair 77 **Firnberg, D** 100
Distributed computer control systems 43
Eurocomp 78 206
ICPCI 78 Performance of computer installations 283
IFIP 77 42
Software engineering for telecommunications **Coakley, F** 282
Transnational data regulation 102
Word processing conference 207

DATA COMMUNICATIONS

British Post Office and packet switching **Feldman, R and Mildenhall, D** 91
British Steel Corporation data network **Goodier, M** 179
Comment on British Post Office report 107
Computer communications: the key to the information society 3
Computing Services Association 333
Data communication channel capacity for multiple-buffered concentrators **Herskowitz, G and Shapiro, S** 196
Data communications system for the APL user **Moore, R** 295
Datalink controls and LSI circuits – the confluence of architecture and technology **Weissberger, A** 234
Distributed computing systems 332
Future trends in computer communications systems 264
Getting the measure of DP 202
Holographic filing 334
Interprocess communicatons by functionnally distributed systems **Maekawa M** 75
Microcomputer system in a communications environment **Smith, I** 134
Practical optical fibre datalinks **Pitcher, J** 300
Transnational dataflow regulation 66

DATABASE

Access to information in Europe **Williams, P** 290
Principles of database management in a distributed system **Joyce, J** 257

FINANCE

Computer terminals in shops 333
Impact of electronic funds transfer systems on networks **Pease, D L** 85
Integrated banking network system **Duncan, A** 94

INTERNATIONAL REVIEW

USA 97, 156, 208, 330
Australia 329

LITERATURE REVIEW 49, 111, 158, 220, 269

NETWORKS

Activities of the UK National Committee on Computer Networks **Nicol, K** 45
British Computer Society statement on networks 167
British Steel Corporation data network **Goodier, M** 179
Designing an X.25 network-to-host interface **Johnson, J P and Heap, J M** 13
Euronet tariffs 166
Evolution of a teleprocessing network **Ford, R** 145
First meeting of Euronet hosts 332
Flow control in message-switched communications networks **Wong, J W** 67
Impact of electronic funds transfer systems on networks **Pease, D L** 85
Integrated banking network system **Duncan, A** 94
Performance evaluation of the Kuipnet computer network **Kitezawa, S and Sakai, T** 149
Principles of recoverability in transaction-processing systems 242
Progress towards open system standards **Taylor, F** 210
Recent developments within Euronet **Huber, W** 79
Standards for open network operation **Houldsworth J** 5
Terminal-handling protocols in a packet-switched public data network **Jamet, B and Monnet, M** 188
X.25 explained **Sloman, M S** 310

PRODUCT REVIEW

Applications

Building society package 171
Counter-top banking terminal 55
First directory on viewdata 55
Police/magistrate system 341
Self-service banking 231
Telemetry 169
Teletext decoder 229
Transaction-processing manager 109
Transaction-processing monitor 109

Data communications

Aeronautical switching systems 229
Communications controller 54
Communications controller 277
Communications-oriented B 800 systems 53
Computerized ticketing machines 341
Data analyser 231
Distributed-systems networking 108
Line procedure converter 54
Message/data switching 277
Message-switching system 170
Multiprocessor system 108
Network-management system 54
Remote computing facility 169
Synchronous/asynchronous converter 342
Tactical communications management 230
Time-division multiplexer 279

Distributed processing

Distributed processing 230
Distributed-processing computer 340
Distributed systems interface 281

Peripherals

Desk-top video terminal 56
Graphics printer 280
Intelligent cassette terminal 281
Intelligent terminal 277
Magnetic-stripe reader terminal 342
Matrix printer 109
Portable terminal 277
Teleprinter 110
Terminal controller 280
Terminal family 278
Terminal system 343
Visual display system 54

Security

Data encryption unit 229
Identity card systems 56

Standards and protocols

Emulator 277
SDLC protocol controller 228
SDLC–X.25 converter 170
SyFA-SNA compatibility 228

Systems

Industrial data acquisition 229
Interactive hotel system 343
Motor-trade package 171
Multiuser processor 171

Telecommunications

Barrier unit 343
Case 430/34 modem 53
Computer-controller PAX 342
4 800 bit/s modem 110
PABX 170
Programmable op amp 278
Remote line tester 168
Short-distance modem 56
Single-channel codec 168

Text processing

Display typewriters 231
Facsimile systems 279
Information management 280
Software-controlled word processor 340
Text processor 281

Timesharing

BASIC processor 281
Multiterminal software package 110

PUBLICATIONS

All about time-sharing and remote computing facilities 205
All about word processing systems 205
Computer softward packages and packaged services market 204
The computer users' year book * 58
Digital data transmission tests on voice channels 204
Electronic banking and credit control 205
Hospital computer systems and procedures **Garrett, R D** 57
Market for automated banking services 203
Networks explained **Offler, F** 57
Point-of-sale equipment market in Europe 204
Specialized common carrier and associated equipment markets 203
Systems and programming standards **Wooldridge, S** 57

STANDARDS AND PROTOCOLS

Character coding for data communications **Clark, R** 159
Data standards in international trade and transport 272
Designing an X.25 network-to-host interface **Johnson, J P and Heap, J M** 13
EBCDIC file conversion program 219
Interlock procedures manual 47
Power station to use CAMAC 48
Progress towards open system standards **Taylor, F** 210
Software standards for unmanned space missions 219
Standards for open network operation **Houldsworth J** 5

UK APL Standards Interest Group 219
UK Business Equipment Trade Association 164
UK National Computer Users Forum 163
X.25 explained **Sloman, M S** 310

British Standards Institution

BS 3257 Glossary of terms used in data processing. Part 7: 1977 Digital computer programming 47
BS 4503 9-track magnetic tape for data interchange. Part 1: 1977 Tape recorded at 31.5 rows per millimeter (800 rows per inch) NRZI, Part 2: 1977 Tape recorded at 63 rows per millimetre (1600 rows per inch phase-encoded) 47
BS 5132 Embossed credit cards. Part 2: 1976 Magnetic stripe encoding for tracks 1 and 2. Addendum No 1: 1978 Track 3 163
BS 5464 Optical character recognition. Part 1: 1977 Character set OCR-A. Shapes and dimensions of the printed image, Part 2: 1977 Character set OCR-B. Shapes and dimensions of the printed image 47
BS 5476: 1977 Program network charts 47
BS 5487: 1977 Recommendations for decision tables in data processing 47
BS 5515: 1978 Code of practice for the documentation of computer-based systems 162
BS 5519 Ribbons and spools used in office machines and data processing equipment. Part 5: 1978 Recommendations for widths of fabric printing ribbons on spools exceeding 19 mm wide 163
BS 5537: 1978 Forms design sheet and layout chart 163
BS 5560: 1978 Office machines – line and character capacity of address master 163
Short guide to international organizations concerned with standards 163

European Computer Manufacturers Association

ECMA-53: 1977 Representation of source program interchange – APL, COBOL, FORTRAN, Minimal BASIC and PL/1 164
ECMA-54; 1977 Data interchange on 200 mm flexible disc cartridge using double frequency recording at 13 262 flux transition per radian on one side 164
ECMA-55: 1977 Minimal BASIC 164

International Telecommunication Union

Instructions for the operation of the international telex service 218
List of addresses of Administrations, recognized private operating agencies, international or regional organizations concerned with telecommunications, and scientific or industrial organizations participating in CCI activities 328
Manual for use by the maritime mobile and maritime mobile-satellite services 219
Provisional recommendations X.3, X.25 X.28 and X.29 on packet-switched data transmission services 328
Yearbook of common carrier telecommunication statistics (chronological series 1967–1976) (5th edition) and Radiocommunication statistics 328

US National Bureau of Standards

An analysis of computer security safeguards for detecting and preventing international computer misuse (**B Ruder and J D Madden**) 327
Audit and evaluation of computer security (**Z G Ruthberg and R G McKenzie**) 217
Computer network interconnection: problems and prospects (**I W Cotton**) 217
Computer security and the Data Encryption Standard (**Ed. D K Branstad**) 327
Considerations in the selection security for automatic data processing systems (**M J Orceyre and R H Courtney, Jr**) 328
Copyright in computer-readable works: policy impacts of technological change 165
A data base management approach to privacy act compliance (**E Fong**) 217
Design alternatives for computer network security (**G D Cole**) 327
The design and implementation of the National Bureau of Standards' network access machine (**R Rosenthal and B D Lucas**) 328
Documentation of computer programs and automated data systems (Proceedings of a symposium held at the NBS, Gaithersbury, MD, USA) 217
The network security center: a system level approach to computer network security (**F Heinrich**) 327
Performance assurance and data integrity practices 217
The use of passwords for controlled access to computer resources (**H M Wood**) 218
User-terminal protocols: entry and exit procedures between terminal users and computer services 165
Validating the correctness of hardware implementations of the NBS Data Encryption Standard (**J Gait**) 327

SYSTEMS REVIEW

Applications

Book information services 117
Bowling cup scoring 116
Digital facsimile 286
Gas displays 175
Hand-writing entry 285
Israel in Europe 226
Lifeboat institution membership 119
Matrix printers 226
Medical centre 286
Medical database 286
Modems for purchasing system 118
Motor dealers 225
Natural resources 287
Order entry 226
University teaching 287
Weather forecasting 115
Weather forecasting 173

Databases

British Library 287
CRC for Info-line 61
Distributed databases 284
Record office archives 174

Data communications

IBM/Univac link 338
Minicomputers in traffic control 60
Optical-fibre link 118

Finance

Bank communications 224
Bank computer centre 118
Bank network 224
Commodities 114
Currency exchange 224
Foreign exchange dealing 225
Insurance networks 338
Life Insurance 115
Norwegian banking 119
Satellite network 336
Stockbroker service 114

Networks

Chinese network 285
Gas network 285
Gas network testing 174
Hydro network 226
Information network 226
Olympics 287
Satellite communications 287
Shell UK oil network 63

Police

Court-police link 284
Marconi system for Suffolk police 62
Norwegian police 338
Police communications 116
Police software development 284
Police system 284
Telephone monitoring 284

Process control

Australian steelworks 117
Computer system at NKK 63

Retailing and warehousing

Article numbering 225
Bar coding 336
Electrical retailing 174
Food network 285
Grocery optical readers 117
ICL POS terminals 62
Mail-order system 118
POS terminals 337
Supermarket network 114
Supermarket uses SyFA 61
Transport catering 174
Wholesaling/retailing system 224

Telecommunications

Modems for Taiwan 118
Operational ECS 61

Transport

Air-freight tariffs 286
Civil aviation 337
Charter fixtures library 338
Container ships 113
Customs documentation 173
Customs package 173
Customs terminals 173
Datapac network interface 60
Ferry bookings 114
Tour booking 285
Train reporting 337
Vehicle monitoring system 59

TELECOMMUNICATIONS

Business telecommunications **de Smith, M** 128
Network operating system for telecommunications applications **Gunton, T** 253
Prospects for common channel signalling in Italy **Decina, M, Mossotto, C and Romagnoli, M** 123

TELEPROCESSING

Availability and reliability of teleprocessing systems **Nokes, C** 33
Evolution of a teleprocessing network **Ford, R** 145

WORD PROCESSING

Selection of a shared-logic word-processing system **Bennett, F J**
Will it pay to increase your word power? 178